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First Named Inventor (to be used for all correspondence after riving filing) Art Unit Examiner Name		Robert David Allen		
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Examiner Name			Robert D. Harlan	
Mail Stop Amendment		Attorney Docket Number	ARC920030103US1	
ENCLOSURES (Check all that apply)				
No fee due ☐ Fee(s) due: \$		□ Revocation of & New Power of Attorney, Address Indication Form □ Request for Refund □ After Allowance Communication to a Technology Center (TC) □ Appeal Communication to Board of Appeals and Interferences □ Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) □ Other Enclosure(s) (see remarks): Claim Count Extra Claims No. Total Claims Independent Claims - 20 = Independent Claims - 3 = Independent		
REMARKS				
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT				
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CERTIFICATE OF MAILING				
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.				
Name (print/type) Yesenia Garcia				
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

n Re Application of:

Robert David Allen et al.

Confirmation No.: 8945

Serial No.: 10/729,169

Group Art Unit: 1713

Filing Date: December 4, 2003

Examiner: Robert D. Harlan

Title: Low Activation Energy Photoresists

PETITION UNDER 37 C.F.R. § 1.181 FOR RECONSIDERATION OF RESTRICTION REQUIREMENT

Mail Stop Amendment

Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. § 1.181, applicants respectfully petition for reconsideration and withdrawal of the Examiner's restriction requirement in the Office Action dated March 27, 2006. As the Examiner's restriction requirement is not subject to appeal to the Board of Patent Appeals and Interferences or to a court, the filing of this petition is proper pursuant to 37 C.F.R. § 1.181(a)(1). Pursuant to 37 C.F.R. § 1.181(f), this petition is timely filed within two months of the March 27, 2006, mailing date of the Office Action.

The facts in support of this petition are as follows:

On December 5, 2005, the Examiner mailed an Office Action that requested restriction of the application to the following two groups:

Group I: claims 1-46, drawn to a polymer, classified in Class 526, subclass 348; and

Group II: claims 47-56, drawn to a composition, classified in Class 525, subclass 240.

In the Office Action of December 5, 2005, the Examiner asserted that the claims of the two groups are related as mutually exclusive species in an intermediate-final product relationship. Citing MPEP § 806.04(b), 3rd para., and § 806.04(h), the Examiner stated that distinctness is proven for claims in the intermediate-final product relationship if the intermediate product is useful to make other than the final product and the species are patentably distinct. Referencing the instant case, the Examiner added

that the intermediate product of the claimed invention is useful as a coating and that the inventions are deemed patentably distinct since there is nothing on the record to show them to be obvious variants.

In the response timely filed on January 5, 2006, applicants elected the claims of Group I with traverse on the grounds that claims 47-56 are dependent upon the invention as recited in independent claims 1, 14, and 19, and as such, represent a combination of the invention as recited in independent claims 1, 14, and 19. In view of the foregoing, applicants requested rejoinder of the claims of Group II and examination of all claims together.

In the Office Action under reply, the Examiner stated that the traversal was not persuasive because the groups are separate and distinct and that a search of all of the claims would place an undue burden on the Examiner. Taking the foregoing position, the Examiner held the restriction requirement as final.

As noted above, with this petition, applicants respectfully request reconsideration and withdrawal of the Examiner's restriction requirement.

MPEP § 806.04(b), provides a discussion of when species may be independent or related inventions. There, it is noted that where species under a claimed genus are not connected in any design, operation, or effect under the disclosure, the species are independent inventions. Where inventions as disclosed and claimed are both (a) species under a claimed genus and (b) related, then the question of restriction must be determined by both the practice applicable to election of species and the practice applicable to other types of restrictions, such as those covered under MPEP § 806.05(j), i.e., related products. If restriction is improper under either practice, there should be no restriction of the claims.

In the instant case, the Examiner is requiring restriction of the polymer of claims 1-46 and the photoresist composition of clams 47-56. In the Office Action of December 5, 2005, the Examiner addresses the requirements of MPEP § 806.04(b) by referencing the third paragraph of MPEP § 806.04(b), which provides that species of carbon compounds may be related to each other as intermediate and final product. Because intermediate-final product species are not independent, in order to sustain a restriction requirement, distinctness must be shown. Distinctness is proven if the intermediate and final products do not overlap in scope and are not obvious variants, and it can be shown that the intermediate product is useful other than to make the final product. If the foregoing cannot be shown, then the claims cannot be issued in separate patents. See also, MPEP § 806.05(j).

It is unarguable that the polymer of claims 1-46 and the photoresist composition of claims 47-56 are related; the Examiner does not argue this fact. The Examiner's intermediate-final product restriction requirement is premised on the assertion that the polymer of the claimed invention may be used as a coating; the Examiner, however, provides no evidence that such is the case. A review of the specification

finds no express disclosure that the claimed polymer may be used as a coating and a study of the disclosure also does not lead to the conclusion that the polymer alone may be used as a coating.

At paragraph 0008 (page 3) of the instant application, it is provided that at the time of the invention, there was a ongoing need for new photoresist materials and compositions as well as methods of patterning substances that would lead to improved high resolution photoresist applications. At paragraph 0009 (page 3) of the instant application, it is disclosed that the present invention addresses the needs in the art by providing improved polymers and photoresist compositions that are particularly suitable for photolithographic applications. Against this backdrop, the specification discloses the improved polymers of the present invention, and the photoresist compositions that are prepared by combining the improved polymers of the present invention with a photoacid generator.

Although the Examiner asserts that the polymer itself may be used for a coating, the specification discloses that it is the photoresist composition that is used to coat a substrate and not the polymer itself. See e.g., paragraphs 0012 (pages 4 to 5), 0132 (page 24), 0150 (pages 28 to 29), 0156 and 0157 (page 31), and Example 21 (pages 43 to 44). Without a proper showing that the polymer itself may be used as a coating, rather than the photoresist composition as disclosed, applicants submit that the Examiner's intermediate-final product restriction cannot stand.

In support of the assertion made in the response filed on January 5, 2006, the following discussion will explain why combination claims 47-56 should not be separated from subcombination claims 1-46.

MPEP § 806.05(c) explains the criteria for distinctness between claims claiming a combination and a subcombination. This section provides that inventions are distinct if it can be shown that a combination does not require the particulars of the subcombination as claimed for patentability (i.e., to show novelty and nonobviousness) and the subcombination can be shown to have utility either by itself or in another materially different combination.

As recited in claims 1-46, the invention relates to a polymer prepared by a monomer mixture comprising at least one first olefinic monomer and at least one second olefinic monomer. As recited in claims 47-56, the invention relates to a lithographic photoresist composition comprising the polymer of claim 1 and a photoacid generator.

It is unarguable that the photoresist composition (i.e., the combination) of claims 47-56 requires the polymer of claims 1-46 to form the claimed combination. Because the specification does not disclose that the polymer may be used in a combination other than the photoresist composition, it follows that the polymer of claims 1-46 (the subcombination) should not be restricted from the photoresist of claims 47-56 (the combination).

The discussions set forth above demonstrate that under either the intermediate-final product analysis of MPEP § 806.05(j) or the combination-subcombination analysis of MPEP § 806.05(c), the same conclusion is drawn, that is, that the photoresist composition of claims 47-56 should not be restricted from the polymer of claims 1-46. In view of the foregoing, applicants respectfully request reconsideration of the restriction requirement first set forth in the Office Action of December 5, 2005, which was made final in the Office Action under reply, and upon reconsideration, withdrawal of the restriction requirement and examination of all claims, i.e., claims 1-56, in the instant application.

If the Examiner has any questions concerning this communication, he is welcome to contact the undersigned attorney by telephone at 650.251.7713 or by e-mail at kcanaan@mintz.com.

Respectfully submitted,

By:

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